L8 ANSWER 1 OF 4 CAPLUS COPYRIGHT 2007 ACS on STN
AN 2004:80668 CAPLUS
DN 140:146648
TI Continuous purification by distillation of methanol solvent in the manufacture of propylene oxide with the simultaneous isolation of methoxypropanols
IN Bassler, Peter; Goebbel, Hans-Georg; Teles, Joaquim Henrique; Rudolf, Peter
PA Basf Aktiengesellschaft, Germany
SO PCT Int. Appl., 34 pp.
CODEN: PIXXD2
DT Patent
LA German
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2004009567	A1	20040129	WO 2003-EP7987	20030722
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	DE 10233386	A1	20040212	DE 2002-10233386	20020723
	CA 2490151	A1	20040129	CA 2003-2490151	20030722
	AU 2003251442	A1	20040209	AU 2003-251442	20030722
	EP 1527056	A1	20050504	EP 2003-765086	20030722
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
	CN 1671677	A	20050921	CN 2003-817693	20030722
	US 2005252762	A1	20051117	US 2004-516939	20041215
	IN 2004CN03084	A	20060217	IN 2004-CN3084	20041231
	MX 2005PA00040	A	20050408	MX 2005-PA40	20050103
	ZA 2005000601	A	20060830	ZA 2005-601	20050121
PRAI	DE 2002-10233386	A	20020723		
	WO 2003-EP7987	W	20030722		

AB In the manufacture of propylene oxide free of coupling products the solvent mixture that accumulates during the synthesis is separated in a dividing wall column having 2 lateral outlets. MeOH is recovered through 1 lateral outlet and methoxypropanols are separated as medium-boiling fraction comprising azeotropic mixture with H2O through the 2nd lateral outlet. The low boilers are separated via the column head and the high boilers are collected in the column sump.
RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 2 OF 4 CAPLUS COPYRIGHT 2007 ACS on STN
AN 2004:80667 CAPLUS
DN 140:146647
TI Continuous purification by distillation of the solvent methanol used in the manufacture of propylene oxide
IN Bassler, Peter; Goebbel, Hans-Georg; Teles, Joaquim Henrique; Rudolf, Peter
PA Basf Aktiengesellschaft, Germany
SO PCT Int. Appl., 35 pp.
CODEN: PIXXD2
DT Patent
LA German
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2004009566	A1	20040129	WO 2003-EP7986	20030722
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	DE 10233388	A1	20040212	DE 2002-10233388	20020723
	CA 2493271	A1	20040129	CA 2003-2493271	20030722
	AU 2003251441	A1	20040209	AU 2003-251441	20030722
	EP 1527055	A1	20050504	EP 2003-765085	20030722
	EP 1527055	B1	20060308		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
	CN 1678599	A	20051005	CN 2003-820005	20030722
	AT 319697	T	20060315	AT 2003-765085	20030722
	MX 2005PA00881	A	20050722	MX 2005-PA881	20050121
	US 2005258026	A1	20051124	US 2005-521784	20050121
	ZA 2005000602	A	20060830	ZA 2005-602	20050121
	IN 2005CN00043	A	20070330	IN 2005-CN43	20050124
PRAI	DE 2002-10233388	A	20020723		
	WO 2003-EP7986	W	20030722		

AB MeOH used as solvent in the manufacture of propylene oxide by oxidation of propylene with H2O2 is purified by distillation with simultaneous separation and isolation of methoxypropanol isomers. The solvent mixture that accumulates during the manufacture is separated in a dividing wall column into a low-boiler fraction containing MeOH, a medium-boiler fraction containing the methoxypropanols as an azeotropic mixture with H2O and a high-boiler fraction containing H2O and propylene glycol.

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2007 ACS on STN
AN 2004:3345 CAPLUS
DN 140:61315
TI Distillation process for separating 1-methoxy-2-propanol and 2-methoxy-1-propanol from propylene oxide-production wastewater
IN Hofen, Willi; Gehrke, Helmut; Kolbe, Barbel; Wilken, Dieter; Gehlen, Carsten; Kampeis, Percy
PA Germany
SO U.S. Pat. Appl. Publ., 11 pp.
CODEN: USXXCO
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2004000473	A1	20040101	US 2003-463780	20030617
PRAI	US 2002-389896P	P	20020620		

AB A process for separating 1-methoxy-2-propanol and 2-methoxy-1-propanol from propylene oxide-production wastewater, comprises: (a) dewatering of the aqueous composition containing 1-methoxy-2-propanol and 2-methoxy-1-propanol to a concentration of 1-methoxy-2-propanol and 2-methoxy-1-propanol of ≥90% in total; and (b) isolation of 1-methoxy-2-propanol and/or 2-methoxy-1-propanol or their mixts. from the product of step (a) by means of distillation Process flow diagrams are presented.

L8 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2007 ACS on STN
AN 2004:2825 CAPLUS
DN 140:61313
TI Distillation process for separating 1-methoxy-2-propanol and 2-methoxy-1-propanol from propylene oxide-production wastewater
IN Hofen, Willi; Gehrke, Helmut; Kolbe, Baerbel; Wilken, Dieter; Gehlen, Carsten; Kampeis, Percy
PA Degussa A.-G., Germany; Uhde G.m.b.H.
SO PCT Int. Appl., 27 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2004000773	A1	20031231	WO 2003-EP6522	20030620
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	EP 1375462	A1	20040102	EP 2002-13677	20020620
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
	AU 2003249854	A1	20040106	AU 2003-249854	20030620
PRAI	EP 2002-13677	A	20020620		
	WO 2003-EP6522	W	20030620		

AB A process for separating 1-methoxy-2-propanol and 2-methoxy-1-propanol from propylene oxide-production wastewater, comprises: (a) dewatering of the aqueous composition containing 1-methoxy-2-propanol and 2-methoxy-1-propanol to a concentration of
1-methoxy-2-propanol and 2-methoxy-1-propanol of ≥90% in total; and (b) isolation of 1-methoxy-2-propanol and/or 2-methoxy-1-propanol or their mixts. from the product of step (a) by means of distillation
RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2007 ACS on STN
AN 2006:1342360 CAPLUS
DN 146:81659
TI Process for making xylene isomers using a deheptanizer with a side -draw recycle
IN Schultz, Michael A.; Maher, Gregory F.
PA USA
SO U.S. Pat. Appl. Publ., 12pp.
CODEN: USXXCO
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI US 2006287563	A1	20061221	US 2005-153686	20050615
WO 2006138063	A2	20061228	WO 2006-US21197	20060601
WO 2006138063	A3	20070215		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

PRAI US 2005-153686 A 20050615
AB In processes for recovering one or more xylene isomers and isomerizing the remaining isomers for recycle, the isomerate is distd. to provide a toluene-containing overhead, a mid-boiling fraction containing C8 aroms., and a bottoms fraction containing C8 aroms. and C9+ aroms. The mid-boiling fraction is recycled to the unit for recovering the sought xylene isomers and has a sufficiently low content of C9+ aroms. that the separation feed to the unit for recovering the sought xylene isomers contains ≤500 ppm C9+ aroms. The processes provide a high-quality xylene isomer product while achieving at least one of debottlenecking, energy savings, and capital savings; process flow diagrams are presented.

L13 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2007 ACS on STN
AN 2001:566696 CAPLUS
DN 135:139369
TI Purification of ammonia by distillation
IN Wostbrock, Karl-Heinz; Kaibel, Gerd; Tragut, Christian; Anken, Gabriele
PA Basf Aktiengesellschaft, Germany
SO U.S. Pat. Appl. Publ., 9 pp.
CODEN: USXXCO
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI US 2001010286	A1	20010802	US 2001-767820	20010124
US 7001490	B2	20060221		
DE 10004311	A1	20010802	DE 2000-10004311	20000201
JP 2001348222	A	20011218	JP 2001-19340	20010129
EP 1122213	A1	20010808	EP 2001-102139	20010201
EP 1122213	B1	20040102		

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO

	AT 257125	T	20040115	AT 2001-102139	20010201
	ES 2214352	T3	20040916	ES 2001-1102139	20010201
PRAI	DE 2000-10004311	A	20000201		

AB Crude ammonia (purity of 95.0-99.9 weight%, preferably 99.0-99.7%) is separated into a low boiler fraction, a high boiler fraction, and an intermediate-boiling pure fraction (purity of ≥99.99 weight%, preferably ≥99.999%) by continuous fractional distn. in a distn. apparatus configured either as a dividing-wall column or as a system of thermally coupled distn. columns. The low boiler fraction is taken off at the top of the distn. apparatus The intermediate-boiling pure fraction is obtained at a side off-take which is preferably provided with droplet precipitators. In addition, the gas loading of the distn. column is restricted so that the operating pressure is 2-30 bar and the F factor is ≤2.0 Pa0.5. The purified NH3 is suitable for manufacture of food and semiconductors.

RE.CNT 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2007 ACS on STN
AN 1997:736293 CAPLUS
DN 128:14414
TI Column with movable vertical dividing wall for continuous distillation separation of multicomponent mixtures
IN Kaibel, Gerd; Stroezel, Manfred; Rheude, Udo
PA BASF A.-G., Germany
SO Ger. Offen., 6 pp.
CODEN: GWXXBX
DT Patent
LA German
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 19617210	A1	19971106	DE 1996-19617210	19960430
	US 5914012	A	19990622	US 1997-845226	19970421
	EP 804951	A2	19971105	EP 1997-106627	19970422
	EP 804951	A3	19980408		
	EP 804951	B1	20020911		
	R: BE, CH, DE, ES, FR, GB, LI, NL				
	ES 2183038	T3	20030316	ES 1997-106627	19970422
	CA 2203821	A1	19971030	CA 1997-2203821	19970425
	CA 2203821	C	20050405		
	JP 10033901	A	19980210	JP 1997-112555	19970430
	CN 1177513	A	19980401	CN 1997-113020	19970430
	CN 1073866	B	20011031		
PRAI	DE 1996-19617210	A	19960430		

AB A distn. column for separation of ≥3 fractions contains ≥1 movable vertical dividing wall(s). The dividing wall is movable in guide rails. Thickness of the dividing wall is 0.1-3 mm compared to 5-10 mm for the conventional rigid dividing wall. A dividing wall section is either attached on 1 side to a column packing layer or not attached. The non-attached side(s) is (are) provided with strip-type spring spacers. The dividing wall section exceeds the packing layer thickness by 1-10 mm and forms a roof-like structure. Preferably, operation of the columns with the dividing wall is arranged so that pressure at the outlet side is greater or equal compared to that at the inlet side.

(FILE 'HOME' ENTERED AT 12:50:11 ON 13 SEP 2007)

FILE 'REGISTRY' ENTERED AT 12:51:28 ON 13 SEP 2007

L1	1	S	METHANOL/CN
L2	1	S	HYDROGEN PEROXIDE/CN
L3	1	S	PROPYLENE OXIDE/CN
L4	1	S	PROPENE/CN

FILE 'CAPLUS, CAOLD' ENTERED AT 12:52:53 ON 13 SEP 2007

L5	586	S	L2 AND L4
L6	306	S	L5 AND L3
L7	76	S	L6 AND L1
L8	4	S	L7 AND DIVIDING WALL
L9	102	S	DISTILL? AND DIVID? WALL
L10	20	S	L9 AND SIDE?
L11	0	S	L10 AND ?OFFTAKE
L12	3	S	L10 AND FRACTION
L13	3	S	L12 NOT L8